

REMARKS

In view of the following remarks and amendments, applicants ask for reconsideration and allowance.

Claims 1-3, 5-9, 11-15, 17-21, 23, 24 and 29-40 are currently pending, of which claims 1, 7, 13 and 19 are independent. Claims 4, 10, 16, 22 and 25-28 were previously cancelled, claims 29-32 have been withdrawn, and claims 1, 7, 13 and 19 have been amended. Support for the amendments can be found at least on page 14, line 22 to page 17, line 21 of the specification, and FIGS. 3A-3E and their related text, for example. No new matter has been presented.

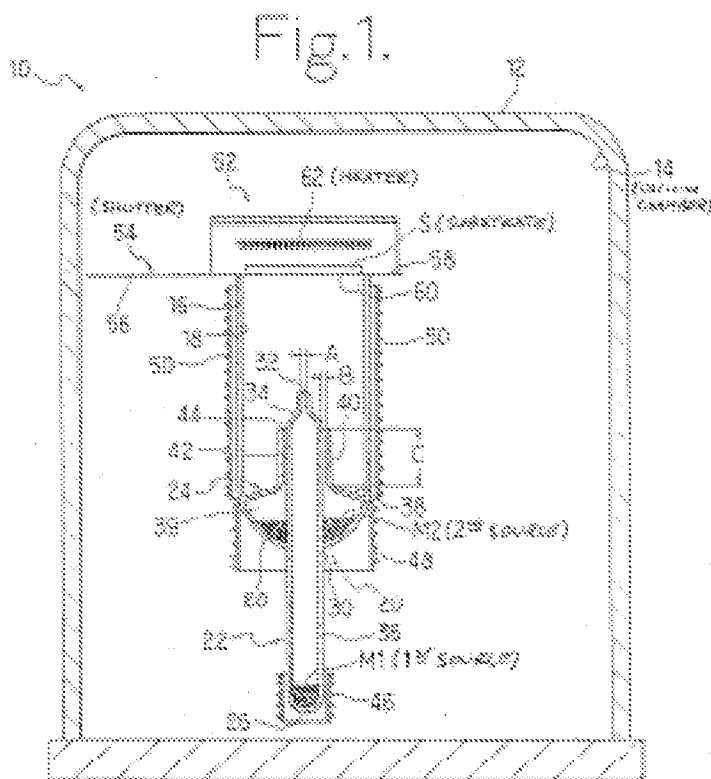
Claim Rejections - 35 USC § 103

Claims 1-3, 5, 6, 19-21, 23, 24, 33 and 36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (U.S. Patent Publication No. 2002/0009538) in view of Aoshima (Japanese Patent Publication No. 2000/223269) and Fujiyashu (U.S. Patent No. 4,668,480). With respect to independent claim 1, applicants request reconsideration and withdrawal of the rejection at least because neither Arai, Aoshima, Fujiyashu, nor any proper combination of the three describes or suggests that “an inclination of the guide portion of the first container is different from an inclination of the guide portion of the second container, such that a direction of the opening of the first container is different from that of the second container,” as recited in claim 1.

Arai describes manufacturing a light-emitting device by forming a thin film by filling a small molecular organic electroluminescence material into an evaporation cell, and heating the material in an inert gas atmosphere to form a light emitting layer on a substrate (Arai: Abstract). With respect to FIG. 1, Arai discloses a gasification evaporation device that has a “control means 104 for moving the sample stage 103 in the horizontal direction, [and] control means 106 for opening and closing the shutter,” and with respect to FIG. 3, Arai discloses a structure of the evaporation chamber (A) 506 that allows the evaporation sources to be switched according to the kind of organic materials to be deposited (Arai: paragraphs 39, 41 and 51). Arai describes using evaporation cells 109a-c (which are referred to as evaporation sources in the Office Action), but

fails to provide any description regarding the shape or other features of the openings in the evaporation cells 109a-c (Arai: paragraph [0040], FIG. 1). Further, applicants submit that Aoshima, which is cited as showing features of the means adapted to move the first, second, and third evaporation sources (at FIGS. 1-2, paragraph 20), does not cure this deficiency. Moreover, the Office acknowledges on pages 4-5 of the Office Action that Arai and Aoshima fail to describe or suggest that either of the first or second containers comprises an included guide portion having an opening.

Fujiyashu, which is cited as showing having at least one of the first or second containers having an inclined guide portion, fails to cure the deficiencies of Arai and Aoshima. Fujiyashu shows in FIG. 1 (reproduced below) an apparatus that is adapted for the fabrication of binary compound films.



In particular, Fujiyashu describes in FIG. 1 an apparatus 10 that has a hermetically sealed housing 12 defining a vacuum chamber 14 (Fujiyashu: cols. 3:51-68, 4:1-57). The two crucibles 22 and 24 (crucible 22 is referred to in the Office Action as the first container) are concentric with respect to each other and with the vapor chamber envelope 16, where the center crucible 22 is tubular in shape, closed at its bottom end 26 and having a diameter considerably less than that of the vapor chamber envelope 16 (Fujiyashu: cols. 3:51-68, 4:1-57). Formed at the top end of the center crucible 22 is a mouth 32 (referred to as an opening for the first container in the Office Action) open to the vapor chamber 18 (Fujiyashu: cols. 3:51-68, 4:1-57). The center crucible mouth 32 is constricted, so that a shoulder 34 (referred to as an inclined guide portion for the first container in the Office Action) is formed between the mouth and major portion 36 of the center crucible (Fujiyashu: cols. 3:51-68, 4:1-57). The outer crucible 24 comprises a frustoconical wall 38 (referred to as an inclined guide portion for the second container) arranged interiorly of the vapor chamber envelope 16 and co-acting with its rounded bottom 28 to bound a space 39 for receiving another source material M2 (Fujiyashu: cols. 3:51-68, 4:1-57). The outer crucible 24 further comprises an upstanding, elongate neck 40 of reduced diameter surrounding part of the major portion 36 of the center crucible 22 with a slight spacing 42 (the slight spacing 42 is referred to as a second container in the Office Action) therebetween (Fujiyashu: cols. 3:51-68, 4:1-57). The constricted neck 40 provides at its top an annular mouth 44 (referred to as an opening to the second container in the Office Action) surrounding the center crucible 22 and open to the vapor chamber 18 (Fujiyashu: cols. 3:51-68, 4:1-57). Fujiyashu fails to describe or suggest that “an inclination of the guide portion of the first container is different from that of the second container, thereby a direction of the opening of the first container is different from that of the second container,” as recited in claim 1, because even if the guide portions 34, 38 of the first and second containers 22, 42 are different, Fujiyashu fails to describe or suggest a respective different direction of the openings 32, 44 of the first and second containers 22, 42. Furthermore, the inclination of the respective guide portions 34, 38 of Fujiyashu has no relationship with the respective directions of the openings 32, 55 of the first and second containers 22, 42. For the sake of argument, even if there was a relationship between the respective guide portions 34, 38 and the openings 32, 44, Fujiyashu shows that the direction of the opening 32 of the first container 22 is the same direction as the opening 44 second container 42.

The Office asserts, with respect to the shape of the openings in the evaporation sources, as recited in claims 1 and 19, that courts have held that selections of shape are a matter of choice which a person of ordinary skill in the art will find obvious absent persuasive evidence that the particular configuration of the claimed shape was significant (Office Action: page 3, item #4). For this assertion, the Office relies upon *In Re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1996) (MPEP 2144.04). However, in that case, the court stated that “[a]ppellants have presented no argument which convinces us that the particular configuration of their container is significant or is anything more than one of numerous configurations a person of ordinary skill in the art would find obvious” (357 F.2d at 672-73, 149 USPQ at 50). In regards to *In Re Dailey*, the Board of Patent Appeals and Interferences stated in *Ex parte TED EUGENE WRIGHT* that if the claims rely upon a criticality of the shape or a requirement of the shape then the selection of the shape is not obvious (*Ex parte TED EUGENE WRIGHT*, Appeal No. 2006-0003, Application 09/499,069, April 6, 2006). Here, as described in this response, and as supported at least with respect to FIGS. 3A-3E and on page 14, line 22 to page 17, line 21 of the specification, the shape and direction of the respective openings in the evaporation sources are significant. Furthermore, neither Arai, Aoshima, Fujiyashu, nor any proper combination of the three describes or suggests these features. Accordingly, for at least these reasons, the rejection of claim 1 and its dependent claims should be withdrawn.

Similarly, claim 19 is allowable over Aoshima and Fujiyashu, whether applied individually or in combination, which fail to describe or suggest that “inclinations of the guide portions are adjusted such that evaporation centers of materials evaporated from the first container and the second container are aligned with one point on a substrate to be evaporated.” As discussed above with respect to claim 1, the inclinations of the guide portions are significant and are not an obvious a matter of choice for a person of ordinary skill in the art. Furthermore, neither Arai, Aoshima, Fujiyashu, nor any proper combination of the three describes or suggests these features. Accordingly, for at least these reasons, the rejection of claim 19 and its dependent claims should be withdrawn.

Claims 7-9, 11-12 and 34 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Arai, Aoshima, Fujiyashu and Konuma (U.S. Patent Publication No. 2002/0030443). For reasons similar to those discussed with respect to claim 1, applicants ask for reconsideration and

withdrawal of this rejection at least because neither Arai, Aoshima, Fujiyashu, Konuma, nor any proper combination of the four, describes or suggests “an inclination of the guide portion of the first container is different from an inclination of the guide portion of the second container, such that a direction of the opening of the first container is different from that of the second container,” as recited in claim 7. Konuma, which is cited as describing an aligning means that aligns a mask and a substrate for the purpose of providing a high-accuracy positioning, fails to cure the deficiencies of Arai, Aoshima, and Fujiyashu. For at least these reasons, the rejection of independent claim 7, and its dependent claims, should be withdrawn.

Claims 13-15, 17, 18 and 35 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Arai, Aoshima, Fujiyashu and Salokatve (U.S. Patent No. 6,053,981). For reasons similar to those discussed above with respect to claim 1, applicants ask for reconsideration and withdrawal of the rejection at least because neither Arai, Aoshima, Fujiyashu and Salokatve, nor any proper combination of the four, describes or suggests that “an inclination of the guide portion of the first container is different from an inclination of the guide portion of the second container, such that a direction of the elliptical opening of the first container is different from that of the second container,” as recited in independent claim 13. Salokatve, which is cited as describing an inclined guide portion of an evaporation source container having an elliptical opening, fails to cure the deficiencies of Arai, Aoshima and Fujiyashu. For at least these reasons, the rejection of independent claim 13, and its dependent claims, should be withdrawn.

Claims 37 and 40, which depend from claims 1 and 19, respectively, stand rejected under 35 U.S.C. 103(a) as being unpatentable over Arai, Aoshima, Fujiyashu and Knauss (U.S. Patent No. 6,090,207). Knauss, which is cited as describing a movement of a substrate and/or deposition sources during deposition, fails to cure the deficiencies of Arai, Aoshima and Fujiyashu. Claims 37 and 40 are allowable at least for depending from allowable base claims 1 and 19. For at least these reasons, the rejection of dependent claims 37 and 40 should be withdrawn.

Claim 38, which depends from claim 7, stands rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Arai, Aoshima, Fujiyashu, Konuma and Knauss, and/or the combination of Arai, Aoshima, Fujiyashu, Salokatve and Knauss. For at least the reasons

presented above for independent claim 7, the rejection of dependent claim 38 should be withdrawn.

Applicants submit that all claims are in condition for allowance.

Conclusion

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

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Respectfully submitted,

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